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Government
Publication

International Development Research Centre Publications



1986

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New Releases

Child health and mortality in sub-Saharan Africa: an annotated bibliography from the 1975-86 literature / Santé et mortalité infantiles en Afrique subsaharienne : bibliographie annotée de la documentation de 1975 à 1986

F. Mackenzie

1987, x + 223 p., IDRC-259e,f, 0-88936-499-0 \$15.00

Energy research: directions and issues for developing countries

Energy Research Group

1986, 184 p., IDRC-250e, 0-88936-479-6 \$12.00

Evaluation in national agricultural research: proceedings of a workshop held in Singapore, 7-9 July 1986

D. Daniels, ed.

1987, viii + 162 p., IDRC-254e, 0-88936-486-9 \$12.00

IDRC annual report 1986-1987 / Rapport annuel CRDI 1986-1987

IDRC, Ottawa

1987, 91 + 83 p., IDRC-003/87e,f, 0-88936-497-4

ISSN: 0704-7584 No charge

Low-cost primary education: implementing an innovation in six nations

W.K. Cummings

1986, 126 p., IDRC-252e, 0-88936-482-6 \$12.00

Market research for food products and processes in developing countries: proceedings of a workshop held in Singapore, 1-4 April 1986

R.H. Young, C.W. MacCormac, ed.

1987, xii + 144 p., IDRC-249e, 0-88936-478-8 \$15.00

Searching: IDRC 1986 — Partners in innovation

IDRC, Ottawa

1987, 44 p., IDRC-257e, 0-88936-494-X No charge

ISSN: 0714-7279

(Also available in French and Spanish)

Small ruminant production systems in South and Southeast Asia: proceedings of a workshop held in Bogor, Indonesia, 6-10 October 1986

C. Devendra, ed.

1987, xii + 414 p., IDRC-256e, 0-88936-493-1 \$18.00

Teaching children of the poor: an ethnographic study in Latin America

B. Avalos, ed.

1986, 175 p., IDRC-253e, 0-88936-484-2 \$10.00

Technology transfer and nationalization in Ghana

(African studies in technology policy series)

S. Adei

1987, xiii + 114 p., IDRC-TS55e, 0-88936-500-8 \$12.00

Tropical root crops: root crops and the African food crisis – proceedings of the third triennial symposium of the International Society for Tropical Root Crops – Africa Branch held in Owerri, Nigeria, 17-23 August 1986

E.R. Terry, M.O. Akoroda, O.B. Arene, ed.

1987, ix + 197 p., IDRC-258e, 0-88936-498-2 \$18.00

Forthcoming Publications

Evaluating primary education: quantitative and qualitative policy studies in Thailand

Amrung Chantavanich, Supang Chantavanich, G. Fry

1988, IDRC-261e, 0-88936-505-9

Impact of modernization on development and demographic behaviour: case studies in seven Third World countries

C. Vlassoff, Barkat-e-Khuda, ed.

1987, IDRC-260e, 0-88936-502-4

Mortality and morbidity: the Matlab experience

(Infant mortality studies series)

S. D'Souza, A. Bhuiya, S. Zimicki, K. Sheikh

1987, IDRC-TS56e, 0-88936-501-6

Solar drying in Africa: proceedings of a workshop held in Dakar, Senegal, 21-24 July 1986

M.W. Bassey, O.G. Schmidt, ed.

1987, IDRC-255e, 0-88936-492-3

(Also available in French)

Urban energy in Fiji: a survey of Suva's household, industrial, and commercial sectors

S. Siwatibau

1987, IDRC-TS59e, 0-88936-481-8

West African sources of health and mortality information: a comparative review (Infant mortality studies series)

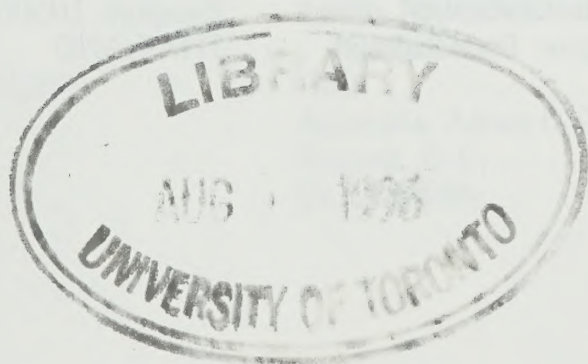
A.G. Hill, W. Graham

1987, IDRC-TS58e, 0-88936-506-7

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Agricultural Economics

Agricultural policy in India: growth with equity (IDRC-201e)

(see Economic and Social Development, page 9)

Livestock in Asia: issues and policies (IDRC-202e)

(see Economic and Social Development, page 9)

Animal Sciences

Wildlife disease research and economic development: proceedings of a workshop held in Kabete, Kenya, 8 and 9 September 1980

L. Karstad, B. Nestel, M. Graham, ed.

1981, 80p., IDRC-179e, 0-88936-307-2

\$5.00

This proceedings focuses attention on the complementary role that domesticated and wild animals can play in terms of land use and economic development. It examines the role of wildlife in the transmission and control of diseases affecting livestock production. A list of participants is included.

Research methodology for livestock on-farm trials: proceedings of a workshop held at Aleppo, Syria, 25-28 March, 1985

T.L. Nordblom, A.E.K.H. Ahmed, G.R. Potts, ed.

1985, 313p., IDRC-242e, 0-88936-446-X

\$18.00

This publication contains 12 studies describing methods used in livestock on-farm trials (LOFTs), primarily in the Middle East/Africa regions. The 40 authors and coauthors worked in multidisciplinary teams as social and biological scientists conducting livestock research in direct cooperation with farmers. Animal classes and modes of production differed across the studies, but all studies emphasized research methods used to test new technologies through LOFTs.

(Will also be available in French and Arabic, Winter 1986)

Cartography

Remote sensing and development: report on IDRC-supported projects in the Sudan, Bolivia, Tanzania, Bangladesh, and Mali

R. LeBlond

1982, 24p., IDRC-174e, 0-88936-302-1

\$2.50

Each of the projects described in this report represents a different experience in "technology transfer" and tests of the feasibility of applying satellite data for the production of thematic maps in developing countries. This report is of interest to personnel working at institutions concerned with research in remote sensing.

(Also available in French)

Crops and Cropping Systems

Cowpeas: home preparation and use in West Africa

F.E. Dovlo, C.E. Williams, L. Zoaka

1976, 96p., IDRC-055eR, 0-88936-071-5

\$6.00

The art of african cookery has been an oral tradition for generations. This publication draws upon these traditions and skills of cooking and processing cowpeas (*Vigna unguiculata*) in Africa. The recipes that are included in this book have been collected throughout West Africa and tested at the Food Research Institute in Accra and the University of Ibadan, Ibadan. New recipes are also included to show modernizing influences.

In addition to the recipes, this book also contains details on processing methods and equipment used in different regions of Africa.

Coffee pulp: composition, technology, and utilization

J.E. Braham, R. Bressani, ed.

1979, 95p., IDRC-108e, 0-88936-190-8

\$8.50

Gathers together some of the research studies undertaken in conjunction with the IDRC-supported by-product utilization (Guatemala) project on chemical, biological, and technological characteristics of coffee pulp as animal feed. Reviews the advances made in research on this by-product, points out ways of utilizing coffee pulp, problems and constraints to further use, and discusses areas requiring further research. Aspects of preservation, processing, and chemical and physiological suitability for animal feed are discussed. Bibliography and statistical data included.

Multiple cropping in the humid tropics of Asia

A.A. Gomez, K.A. Gomez

1983, 248p., IDRC-176e, 0-88936-304-8

\$12.00

This book recognizes the great potential of multiple cropping for increasing farm productivity in the humid tropics of Asia and the unique requirements of multiple-cropping technology. It summarizes the results of current research and development efforts in multiple cropping, evaluates contemporary schools of thought on research and extension methodologies, identifies areas of research and development that are expected to maximize payoffs in terms of increased farm productivity, and describes the Philippine experience in accelerating the adoption by farmers of multiple-cropping techniques.

Root crops in Eastern Africa: proceedings of a workshop held in Kigali, Rwanda, 23-27 November 1980

Cosponsored by Gouvernement du Rwanda, International Institute of Tropical Agriculture, and IDRC

IITA, Ibadan; IDRC, Ottawa

1982, 128p., IDRC-177e, 0-88936-305-6

\$10.00

The workshop brought together researchers and policy-makers to discuss and identify constraints to root crop production in the region and to establish means of working together internationally and nationally toward a solution to production constraints.

Intercropping: proceedings of the second symposium on intercropping in semi-arid areas, held at Morogoro, Tanzania, 4-7 August 1980

C.L. Keswani, B.J. Ndunguru, ed.

1982, 168p., IDRC-186e, 0-88936-318-8

\$9.00

This proceedings deals with agronomy, plant breeding, plant protection, and farming systems research. Each section contains a summary and conclusion of the work presented and selected papers. This second SISA was organized under the auspices of the University of Dar es Salaam, the Tanzania National Scientific Research Council (UTAFITI), and IDRC.

Asian cropping systems research: microeconomic evaluation procedures

G.R. Banta

1982, 56p., IDRC-197e, 0-88936-335-8

\$5.00

This publication analyzes the microeconomic component of cropping systems research in Southeast Asia and examines the systems network and the role of the International Rice Research Institute (IRRI). It describes the role of the agricultural economist and develops informal economic analysis procedures that will be of value for team economists on research sites.

By-product utilization for animal production: proceedings of a workshop on applied research held in Nairobi, Kenya, 26-30 September 1982

B. Kiflewahid, G.R. Potts, R.M. Drysdale, ed.

1983, 158p., IDRC-206e, 0-88936-365-X

\$10.00

This workshop included sessions on research results and research methodology. The reports of the sessions on research results contain useful information on the use of by-products in animal feeding in different parts of Africa with examples of the use of by-products and animal wastes from other parts of the world, particularly Indonesia and Pakistan.

The section based on research-methodology sessions includes papers on methods employed in evaluating by-products as animal feeds, applying research results, standardizing analytical methods of evaluating the nutritive value of by-products, and difficulties involved in applying research results to farm situations. Tables and diagrams supplement the text.

Crop improvement in Eastern and Southern Africa: research objectives and on-farm research: a regional workshop held in Nairobi, Kenya, 20-22 July 1983

R.A. Kirkby, ed.

1984, 123p., IDRC-218e, 0-88936-396-X

\$10.00

The workshop brought together a small group of scientists working in food-crop improvement programs in Eastern and Southern Africa to discuss planning, conducting, and developing such programs. Emphasis was placed on those methodological aspects, common to most crops grown by small-scale farmers, that contributed most to the likelihood that the research results will be utilized by the farmer.

Contained within the report are brief accounts of the local varieties grown and cultivation practices currently employed, institutional organization for crop improvement, and evaluation procedures used in arriving at a new recommendation for extension. The report also includes a summary of a discussion session that looked at the organization of crop-improvement programs, setting of technical objectives and application of selection criteria, and methodology for multi-location and on-farm testing.

Tropical root crops: production and uses in Africa: proceedings of the second triennial symposium of the International Society for Tropical Root Crops — Africa Branch held in Douala, Cameroon, 14-19 August 1983

E.R. Terry, E.V. Doku, O.B. Arene, N.M. Mahungu, ed.

1984, 231p., IDRC-221e, 0-88936-409-5

\$15.00

A mixture of original research, updates on procedures, literature reviews, and survey reports, this document resulted from the second symposium of the International Society for Tropical Root Crops — Africa Branch with 77 participants from 16 countries. The focus was cassava, yams, cocoyams, and sweet potatoes from the perspectives of breeders, agronomists, soil specialists, plant pathologists, entomologists, nutritionists, food technologists, etc. Learning from past successes and failures, many of the researchers directed their efforts toward problems obstructing progress in research for improved production and use of root crops and attempted to view realistically the context in which their results would be applied. The publication includes a list of participants.

(Also available in French)

Pasture improvement research in Eastern and Southern Africa: proceedings of a workshop held in Harare, Zimbabwe, 17-21 September 1984

J.A. Kategile, ed.

1985, 508p., IDRC-237e, 0-88936-439-7

\$12.00

This publication describes the proceedings of a meeting of pasture scientists in Eastern and Southern Africa. The meeting convened to review pasture research, discuss research methodologies, and draw up a regional strategy for research on the improvement and management of pastures for the small-scale farmer. The activities planned as a result of this

meeting were designed to stimulate interest among pasture scientists and to lead to a better understanding of the type of pasture species and the management required to increase the feed availability for cattle and the land quality in small-holding and communal areas in Eastern and Southern Africa.

(Also available in French)

Economic and Social Development

Resource allocation to agricultural research: proceedings of a workshop held in Singapore, 8-10 June 1981

D. Daniels, B. Nestel, ed.

1981, 170p., IDRC-182e, 0-88936-314-5

\$9.00

This proceedings focuses on the existing allocation systems in developing countries. It examines the personnel needs, organization of work, research policy, and decision-making involved in the allocation of funds for agricultural research. It will be of interest to researchers and policymakers in developing countries. A list of participants is included.

(Also available in French and Spanish)

Tourism in the Caribbean: the economic impact

S.B. Seward, B.K. Spinrad, ed.

1982, 163p., IDRC-196e, 0-88936-334-X

\$12.00

The economic implications of tourism in Antigua, Aruba, St. Lucia, and the United States Virgin Islands are described. The book includes detailed studies that assess tourism's contribution to gross domestic product, employment, consumer expenditures, seasonal fluctuations, and tax revenues. It will be of interest to policymakers, planners, and academics. Critical areas for further research and the need for ongoing data collection and analysis throughout the Caribbean are emphasized. A bibliography is included.

Agricultural policy in India: growth with equity

J.S. Sarma

1982, 94p., IDRC-201e, 0-88936-347-1

\$5.00

This study reviews agricultural policies as they have evolved in India, assesses their impact on the economy, and examines the conflicts between growth and equity in the agricultural sector. The book includes a bibliography and concluding observations.

Livestock in Asia: issues and policies

J.C. Fine, R.G. Lattimore, ed.

1982, 192p., IDRC-202e, 0-88936-353-6

\$9.00

This monograph was developed from papers presented at a conference held in Singapore. It examines a number of important agricultural policy issues that identify the economic and social factors involved to increase livestock production. A discussion summary and a list of participants are included.

Small-scale fisheries in Asia: socioeconomic analysis and policy

T. Panayotou, ed.

1985, 284p., IDRC-229e, 0-88936-424-9

\$15.00

This volume is a partial response to the growing need for a better understanding of the constraints and opportunities facing small-scale fisheries. It contains 27 papers of small-scale capture and culture fisheries from five Asian countries — Bangladesh, Malaysia, Philippines, Sri Lanka, and Thailand — based on original field research sponsored by the IDRC. The objective is to describe and analyze the socioeconomic conditions of small-scale fishermen in these countries, to evaluate government policies, and to propose policy alternatives. Among the subjects covered are socioeconomic conditions, productivity and economic efficiency, cost structure and profitability, marketing, social and institutional constraints, and government programs.

Sugar: threat or challenge? An assessment of the impact of technological developments in the high-fructose corn syrup and sucrochemicals industries

C.Y. Thomas

1985, 140p., IDRC-244e, 0-88936-451-6

\$12.00

This study assesses the threat to the traditional role of sucrose as the leading sweetener brought about by several technological innovations and the challenge afforded by similar innovations. These innovations have led to a new field of science, sucrochemistry, whose essence is to treat sucrose not as a sweetener but as a chemical product that can be transformed into other chemicals of greater worth. The promise of a radical departure from the traditional sequences of industrialization of tropical staples exists, and its implications for developing areas and the Caribbean are drawn.

(Will be available in French and Spanish)

Education

The world of literacy: policy, research, and action

M. Gayfer, B. Hall, J.R. Kidd, V. Shrivastava

1979, 128p., IDRC-117e, 0-88936-193-2

\$9.00

Analyzes and interprets a vast amount of literature about the various aspects of literacy. Sets out the factors in the achievement of literacy and discusses the application and implications of several guidelines for agencies and programs of adult literacy, elementary school systems, nonformal education, adult education, and research. Includes bibliography.

(Also available in French)

Preventing school failure: the relationship between preschool and primary education: proceedings of a workshop on preschool research in Bogotá, Colombia, 26-29 May 1981

IDRC, Ottawa; Ford Foundation, Office for Latin America and the Caribbean, Bogotá, Colombia

1983, 178p., IDRC-172e, 0-88936-300-5 \$10.00

Early childhood stimulation is examined in the light of case studies and the national program presented. The publication is divided into three major parts: research and action in pre-school and primary education, consideration of the problems, and general discussions and recommendations. A list of participants is included.

(Also available in Spanish)

Eight years of their lives: through schooling to the labour market in Chile

E. Schiefelbein, J.P. Farrell

1982, 207p., IDRC-191e, 0-88936-326-9 \$12.00

This study traces 8 critical years in the lives of many young Chileans, through the various stages of the school systems and into the labour market. The objective of the study was to try to find ways to move from the less preferable to the more tolerable version of social-distribution problems in Chile. This publication is of interest to educational policymakers at all levels.

Financing educational development: proceedings of an international seminar held in Mont Sainte Marie, Canada, 19-21 May 1982

IDRC, Ottawa; CIDA, Ottawa

1982, 142p., IDRC-205e, 0-88936-361-7 \$8.00

This proceedings contains papers presented and relevant comments on educational economics and financing in developing countries. It includes a list of participants.

(Also available in French)

Educational research environments in the developing world

S. Shaeffer, J.A. Nkinyangi, ed.

1983, 288p., IDRC-213e, 0-88936-378-1 \$15.00

This monograph discusses the world of educational research through the various environments — content research, research for planning, evaluation research, and action research. It looks at the use of educational research to understand the state of the education system and its policies. The publication includes several case studies from Africa, Asia, Latin America, the Caribbean, and the Middle East.

(Also available in French and Spanish)

Rural university: learning about education and development

F. Arbab

1984, 71p., IDRC-231e, 0-88936-427-3 \$8.00

The rural university is an experience in education and development to which many people have contributed over

about a decade. It began when a small group of university professors in Colombia became intensely involved in the community life of a nearby rural region; it gradually grew to be organized within an institution with its own well-defined concept and methods. In this book, Farzam Arbab, as the voice of the professors who founded the rural university, describes the evolution of the training and curricula and the philosophy behind the work. He reexamines the concepts of rural development prevalent during the past few decades and provides much food for thought, not only for educators but also for development personnel, agencies, etc. Most of the graduates — promoters, technicians, and engineers interested in rural well-being — are a cadre of young people who are investing efforts in improving life in the rural areas rather than migrating to the nearby city of Cali.

(Also available in French and Spanish)

The determinants of school achievement: a review of research for developing countries

E. Schiefelbein, J. Simmons

1981, 44p., IDRC-TS24e, 0-88936-273-4

\$3.00

Reviews results of 26 studies on the determinants of student cognitive achievement in developing countries. Discusses schooling characteristics, teachers' attributes, and student traits, and concludes with the implications for policy research.

(Also available in Spanish)

Connecting worlds: a survey of developments in educational research in Latin America

R.G. Myers

1981, 88p., IDRC-TS35e, 0-88936-284-X

\$6.50

Examines the situation of educational research in developing countries and its relationship to the research done in the industrialized countries.

(Also available in Spanish)

Educational innovation in the Philippines: a case study of Project Impact

P.V. Flores

1981, 88p., IDRC-TS36e, 0-88936-294-7

\$6.50

This case study presents an historical account of the politics of innovation, implementation, and dissemination on Project Impact in the Philippines. It deals with the program instruction, peer teaching, educational projects, and project evaluation involving cost and effectiveness.

Educational financing in developing countries: research findings and contemporary issues

E. Schiefelbein

1983, 168p., IDRC-TS38e, 0-88936-348-X

\$8.00

This publication discusses educational financing, cost of education, and educational research, both in public educa-

tion and in higher education. Educational and statistical tables are included.

(Also available in French)

Educational networks in Latin America: their role in the production, diffusion, and use of educational knowledge

E. Schiefelbein

1982, 44p., IDRC-TS39e, 0-88936-350-1

\$3.50

This report deals with major educational networks operating in Latin America. It identifies overlapping and possible social forces that are shaping the development of these networks and provides information that could be used in future forums on educational research. Research is defined in this report as any activity that leads to better information or produces findings relevant to policy formation. The book contains a list of periodical publications with Latin American distribution.

(Also available in French and Spanish)

Universal primary education in Tanzania

I.M. Omari, A.S. Mbise, S.T. Mahenge, G.A. Malekela, M.P. Beshu

1983, 87p., IDRC-TS42e, 0-88936-359-5

\$8.00

This technical study discusses primary education in Tanzania by highlighting aspects of educational policy, educational enrollment, aims of education, and the economics of education. It presents the trends in teacher training and quality of education and provides educational statistics and references.

Educational research: the English-speaking Caribbean

E.L. Miller

1984, 199p., IDRC-TS46e, 0-88936-399-4

\$10.00

This technical study traces the origins and evolution of educational research in the English-speaking Caribbean; explores its social and historical dimensions; examines in considerable detail the existing resources for educational research in the Windward and Leeward Islands, Bahamas, Barbados, Guyana, Belize, Jamaica, and Trinidad; and takes a look at some regional projects. The author makes a strong case for assigning higher priority to educational research than it has so far been accorded.

Canadian academic relations with the People's Republic of China since 1970

Volume 1: Findings and recommendations

Volume 2: China profiles of Canadian universities / Supplementary materials

M. Singer

1986, 67p., IDRC-TS54e, 0-88936-475-3 Volume 1

\$7.00

1986, 412p., IDRC-TS54e, 0-88936-475-3 Volume 2

\$18.00

This report provides historical, statistical, and thematic analyses to facilitate our understanding of the current state and future directions of academic exchange activity with China. The report is published in two volumes: volume 1

contains analyses on the experiences of the exchange academics and includes a summary of statistics and findings, as well as a series of recommendations; volume 2 contains an analysis of the China exchange activities of 29 Canadian universities and includes 61 appendices of supporting material.

(Will be available in French, Winter 1986)

Energy

Rural energy in Fiji: a survey of domestic rural energy use and potential

S. Siwatibau

1981, 132p., IDRC-157e, 0-88936-256-4

\$10.00

The author discusses the present use of current energy in rural Fiji and evaluates alternative sources of energy supplies. The advisability of expanding the use of biogas and the possibility of improving conditions of domestic cooking, notably through conservation, are assessed. This monograph includes case studies and tables of statistics.

Renewable resources in the Pacific: proceedings of the 12th Pacific Trade and Development Conference, held in Vancouver, Canada, 7-11 September 1981

H.E. English, A. Scott, ed.

1982, 293p., IDRC-181e, 0-88936-312-9

\$15.00

This proceedings covers such issues as management of transboundary migratory fish stocks; joint ventures between distant-water fishing fleets and coastal regions; foreign investment in forest harvesting and wood processing; access for products of developing countries to developed-country markets; and technology transfer and cooperation at the research frontiers of conservation and utilization in fish, forests, and fuels. A list of participants and a bibliography are included.

Fisheries

Tropical oyster culture: a selected bibliography

D.B. Quayle

1975, 40p., IDRC-052e, 0-88936-066-9

\$3.50

Bibliography compiled to aid current research on improved techniques for the cultivation of tropical oysters. Also included are 267 references.

Induced fish breeding in Southeast Asia: report of a workshop held in Singapore, 25-28 November 1980

F.B. Davy, A. Chouinard, ed.

1981, 48p., IDRC-178e, 0-88936-306-4

\$4.50

This report summarizes discussion sessions on gonadal maturation, gametic preservation, induced spawning, and

larval rearing. A list of participants and recommendations for research priorities are included as is a microfiche of country reports.

**Aquaculture economics research in Asia:
proceedings of a workshop held in Singapore,
2-5 June 1981**

Cosponsored by IDRC and the International Center for
Living Aquatic Resources Management

IDRC, Ottawa; ICLARM, Manila

1982, 128p., IDRC-193e, 0-88936-330-7

\$12.00

Fisheries biologists and economists from nine South and Southeast Asian countries discussed the economic principles of existing and experimental aquacultural production systems, as well as aquaculture's contribution to society as a whole. Case studies were presented. The book includes a list of participants and a selected bibliography.

**Fish by-catch . . . bonus from the sea: report
of a technical consultation on shrimp by-catch
utilization held in Georgetown, Guyana,
27-30 October 1981**

Cosponsored by FAO and IDRC

FAO, Rome; IDRC, Ottawa

1982, 163p., IDRC-198e, 0-88936-336-6

\$15.00

This consultation was attended by specialists from 20 countries and 10 agencies. Background documents and papers presented a varied experience in the recovery, processing, and marketing of fish by-catch in all the developing regions of the world. This report is of interest to executive administrators, policymakers, and all personnel involved in fisheries development. It includes a list of participants and a bibliography.

(Also available in French and Spanish)

**Bivalve culture in Asia and the Pacific:
proceedings of a workshop held in Singapore,
16-19 February 1982**

F.B. Davy, M. Graham, ed.

1982, 90p., IDRC-200e, 0-88936-343-9

\$5.00

This proceedings reviews culture practices, postharvest handling, economics of mollusc management, and future research needs for bivalve producers. It presents Asian and Pacific country reports and includes a list of participants and a bibliography.

(Also available in French and Spanish)

**Fish quarantine and fish diseases in Southeast
Asia: report of a workshop held in Jakarta,
Indonesia, 7-10 December 1982**

UNDP/FAO South China Sea Fisheries Development and
Coordinating Program, Manila; IDRC, Ottawa

1983, 79p., IDRC-210e, 0-88936-376-5

\$5.00

This report presents a summary of the workshop and the recommendations that were developed. It considers the

status of fish-disease research and legislation, fish-disease agents and hosts, and fish quarantine and certification and includes country reports for Indonesia, Malaysia, the Philippines, Singapore, and Thailand.

Small-scale fisheries in Asia: socioeconomic analysis and policy (IDRC-229e)

(see Economic and Social Development, page 10)

Finfish nutrition in Asia: methodological approaches to research and development

C.Y. Cho, C.B. Cowey, T. Watanabe

1985, 160p., IDRC-233e, 0-88936-429-X

\$10.00

Fish nutrition is fundamental to most aquaculture practices in Asia. It is recognized that formulated feeds are required to increase productivity of many important species now being cultured within the region. This publication deals with methodological research and development. Included are discussions on nutrient requirements and deficiencies, fish feeds and their quality, feeding practices, nutrition of broodstock and larvae, and approach and design of nutrition experimentation, as well as an extensive reference and suggested reading list. Also included are research papers dealing with a variety of questions that are important for countries within the region.

Science of the culture of freshwater fish species in China

IDRC, Ottawa

1981 (set of 17 microfiche), IDRC-TS16e, 0-88936-180-0 \$10.00

The history of Chinese freshwater fisheries is presented and the utilization of resources, fish culture, propagation of cultured fishes, fish feed, prevention and cure of disease, and fish processing are discussed.

Tropical oysters: culture and methods

D.B. Quayle

1980, 80p., IDRC-TS17e, 0-88936-181-9

\$6.00

This comprehensive manual is of use to both researchers and field personnel involved in producing tropical oysters. Detailed instructions, glossary, and references are a practical guide that elaborates issues touched upon by the film "Oyster Farming in the Tropics" (available from IDRC) for those who seek to produce oysters and other bivalves for food in the tropics.

(Also available in French and Spanish)

Rearing of marine fish larvae in Japan

K. Kuronuma, K. Fukusho

1984, 109p., IDRC-TS47e, 0-88936-406-0

\$10.00

An IDRC-sponsored regional workshop on induced fish breeding prompted considerable interest in further information on the most suitable approaches, facilities, and equip-

ment for the improved rearing of larvae of many marine fin-fish species. Subsequent examination revealed that this information could not be found in a single text suitable for use in the developing countries. This technical study is the result of a detailed review of the literature on the subject — most of which was available only in Japanese — and constitutes a summary account of the state of the art in induced fish breeding in Japan today. It consists of three main parts: an introduction to aquaculture in Japan, the basic principles involved in the rearing of marine fish larvae that have been developed in Japan, and the application of these techniques to rearing larvae of selected species of fish. Sources are provided at the end of each section with full bibliographic detail in the reference list.

Food and Nutrition

Cowpeas: home preparation and use in West Africa (IDRC-055eR)

(see Crops and Cropping Systems, page 6)

Nutritional standards and methods of evaluation for food legume breeders

J.H. Hulse, K.O. Rachie, L.W. Billingsley

1977, 100p., IDRC-TS7e, 0-88936-137-1

\$6.00

This book describes nutritional quality standards in legume plant breeding, including recommendations for standards of food composition. It also discusses physical and chemical analysis, food analysis, and biological evaluation techniques.

Improving small-scale food industries in developing countries

W. Edwardson, C.W. MacCormac, ed.

1984, 167p., IDRC-TS48e, 0-88936-398-6

\$10.00

Small- and medium-sized food-processing industries are the main source of low-cost traditional food products in the developing countries. They also constitute an important source of employment and income. Several countries are now taking steps to strengthen the sector by attempting to match local skills and industry with local market conditions. A strong small- to medium-scale industrial sector is perceived as a solid basis for the development of larger-scale industry in the future. This text summarizes the most recent of the continuing discussions (at workshops held in Singapore in 1980, Bangkok in 1981, and Vancouver in 1983) on how industrial research and extension services can best be made available to the small-scale food processor.

Forestry

Natural durability and preservation of one hundred tropical African woods

Y. Fortin, J. Poliquin

1976, 131p., IDRC-017e, 0-88936-090-1

\$10.00

Assembles, in the form of synoptic charts, all available published or unpublished studies on the durability and artificial preservation of 100 of the most important African woods. Includes indexes to botanical and common names and a 250-item bibliography.

(Also available in French)

Bamboo research in Asia: proceedings of a workshop held in Singapore, 28-30 May 1980

G. Lessard, A. Chouinard, ed.

1980, 228p., IDRC-159e, 0-88936-267-X

\$12.00

The bamboos are plants of enormous importance to the rural people in several regions of the world, particularly in South and Southeast Asia. As such, the IDRC and the International Union of Forestry Research Organizations (IUFRO) held a joint regional workshop on bamboo research in Asia in 1980. The main objectives of the workshop were to review existing knowledge on the cultivation and utilization of bamboo in Asia, to consider the most important problems and constraints preventing the greater use of the bamboo resource in the region, and to identify regional research needs and priorities on bamboo cultivation and utilization. The proposals contained in this report reflect the consensus of those who attended the workshop. A list of participants is included.

Leucaena research in the Asian-Pacific region: proceedings of a workshop held in Singapore, 23-26 November 1982

IDRC, Ottawa

1983, 192p., IDRC-211e, 0-88936-372-2

\$8.00

This workshop was convened to consolidate research on *Leucaena leucocephala*'s multiple uses as forage, fuelwood, poles, and green manure. This report summarizes recent research and technical advances with *Leucaena*; advises on *Leucaena* wood and forage production; assesses major ecological and socioeconomic constraints to *Leucaena* production, evaluating the potential of other nitrogen-fixing species; and identifies research needs and priorities for development.

Irrigated forestry in arid and semi-arid lands: a synthesis

F.B. Armitage

1985, 160p., IDRC-234e, 0-88936-432-X

\$12.00

This synthesis is aimed at enhancing irrigated forestry through an examination of past experience, the range of inputs required, and the benefits of integrating tree plantations with irrigated agriculture. It reviews the potential for

irrigated forest plantations in arid and semi-arid lands and provides a checklist of economic, sociological, and technical criteria needed to guide decisions as to the feasibility of such developments. Actions to be covered in the planning, implementation, and operational phases of irrigated forest plantations are indicated as are illustrative production levels and research needs. The closing chapters review the approaches in economic analysis, management, and planning.

(Will be available in French, Autumn 1986)

Tropical timber for building materials in the Andean Group countries of South America

F.J. Keenan, M. Tejada

1984, 151p., IDRC-TS49e, 0-88936-423-0

\$10.00

This publication summarizes research to develop the technology for using the forest resources of the region as building materials. Emphasis is given to the principles and approaches developed in the project that could be transferred to similar projects in other parts of the world.

(Will be available in Spanish)

General Interest

IDRC annual report 1985-1986 / Rapport annuel CRDI 1985-1986

IDRC, Ottawa

1986, 90 + 84p., IDRC-003/86e,f, 0-88936-471-0

No charge

ISSN: 0704-7584

Searching: IDRC 1985 — Research: a path to development

IDRC, Ottawa

1985, 52p., IDRC-245e, 0-88936-455-0

No charge

ISSN: 0714-7279

The IDRC annual review describes the activities of the various divisions during 1985.

(Also available in French and Spanish)

A decade of learning: International Development Research Centre, Agriculture, Food and Nutrition Sciences Division — the first ten years

IDRC, Ottawa

1981, 180p., IDRC-170e, 0-88936-297-1

\$6.00

This publication reviews the projects and programs of IDRC's Agriculture, Food and Nutrition Sciences Division during its first 10 years of operation. The history, philosophy, and style of the division are presented along with an examination of activities in each of the principal developing regions as well as a summation of experience and an outline of future directions.

(Also available in French and Spanish)

International Development Research Centre projects, 1970-1981

IDRC, Ottawa

1982, 384p., IDRC-180e, 0-88936-308-0

No charge

This publication contains brief descriptions and an index to all projects supported by IDRC from 1970 to 1981.

(Also available in French and Spanish)

International Development Research Centre projects, 1981-1985

Supplement to projects 1970-1981

IDRC, Ottawa

1986, 464p., IDRC-247e, 0-88936-467-2

No charge

(Also available in French)

With our own hands: research for Third World development: Canada's contribution through the International Development Research Centre, 1970-1985

IDRC, Ottawa

1986, 206p., IDRC-246e, 0-88936-460-5

No charge

This book marks a milestone in the continuing efforts of the International Development Research Centre to stimulate and support research and its related activities for the benefit of developing countries. The text falls into three main parts. First, an introduction by an eminent Canadian is given. Second, the role of research in Third World development is set in a global and historical perspective, and the outputs from IDRC's endeavours between 1970 and 1985 are summarized. Third, 10 case studies of "research for development" with which IDRC has been associated are examined.

(Also available in French and Spanish)

Geophysics

Earthquake history of Ethiopia and the Horn of Africa

P. Gouin

1979, 259p., IDRC-118e, 0-88936-194-0

\$18.00

A history of Ethiopian earthquakes including annotated references to written material on telluric activity from the year 1400 to 1974. Contains explanatory notes, discussions, and conclusions drawn from the data.

Health Care

SALUS: low-cost rural health care and health manpower training: an annotated bibliography with special emphasis on developing countries

A series of annotated bibliographies published from the IDRC's computerized data base of nontraditional methods of delivering health care, and the training and use of auxiliary health workers in remote regions of developing countries.

(Volume 1)

S. Akhtar, ed.

1975, 165p., IDRC-042e, 0-88936-051-0 \$10.00

(Volume 2)

F.M. Delaney, ed.

1976, 182p., IDRC-069e, 0-88936-093-6 \$10.00

(Volume 3)

F.M. Delaney, ed.

1977, 187p., IDRC-093e, 0-88936-138-X \$10.00

(Volume 4)

F.M. Delaney, ed.

1979, 186p., IDRC-125e, 0-88936-201-7 \$10.00

(Volume 5)

R.M. Bechtel, ed.

1980, 194p., IDRC-144e, 0-88936-233-5 \$10.00

(Volume 6)

R.M. Bechtel, ed.

1981, 157p., IDRC-153e, 0-88936-249-1 \$10.00

(Volume 7)

R.M. Bechtel, ed.

1981, 144p., IDRC-165e, 0-88936-287-4 \$10.00

(Volume 8)

R.M. Bechtel, ed.

1981, 143p., IDRC-173e, 0-88936-301-3 \$10.00

(Volume 9)

R.M. Bechtel, ed.

1982, 149p., IDRC-187e, 0-88936-322-6 \$10.00

(Volume 10)

R.M. Bechtel, ed.

1983, 148p., IDRC-216e, 0-88936-388-9 \$10.00

(Volume 11)

R.M. Bechtel, ed.

1984, 134p., IDRC-222e, 0-88936-410-9 \$10.00

(Volume 12)

R.M. Bechtel, ed.

1984, 134p., IDRC-225e, 0-88936-417-6 \$10.00

(Volume 13)

R.M. Bechtel, ed.

1984, 134p., IDRC-227e, 0-88936-420-6 \$10.00

(Volume 14)

R.M. Bechtel, ed.

1984, 172p., IDRC-228e, 0-88936-421-4 \$10.00

(Volume 15)

R.M. Bechtel, ed.

1984, 148p., IDRC-230e, 0-88936-425-7 \$10.00

SALUS: low-cost rural health care and health manpower training: a cumulative index to volumes 1-10

R.M. Bechtel, ed.

1983, 150p., IDRC-217e, 0-88936-389-7 \$10.00

SALUS: low-cost rural health care and health manpower training: a cumulative index to volumes 11-15

R.M. Bechtel, ed.

1984, 76p., IDRC-232e, 0-88936-428-1 \$10.00

Health care in the People's Republic of China: a bibliography with abstracts

S. Akhtar

1975, 182p., IDRC-038e, 0-88936-044-8

\$15.00

A bibliography of 560 books issued outside of China from 1949 to 1974. Includes abstracts, primarily in English, and sources of information on Chinese documents, addresses of selected authors and institutions, and author and subject indexes.

Role of cassava in the etiology of endemic goitre and cretinism

A.M. Ermans, N.M. Mbulamoko, F. Delange, R. Ahluwalia, ed.

1980, 182p., IDRC-136e, 0-88936-220-3

\$10.00

This monograph summarizes a series of clinical and experimental studies of endemic goitre and cretinism. It establishes clearly that, in Central Africa, these conditions are caused by iodine deficiency and a goitrogen found in cassava. The study was carried out on the basis of an alternation between clinical and experimental studies. A listing of general conclusions and a list of references are included.

Nutritional factors involved in the goitrogenic action of cassava

F. Delange, F.B. Iteke, A.M. Ermans, ed.

1982, 100p., IDRC-184e, 0-88936-315-3

\$6.00

This monograph is a continuation of the study reported by Ermans et al. in "Role of cassava in the etiology of endemic goitre and cretinism" (IDRC-136e). It sheds new light on the nutritional and environmental aspects of cassava toxicity. The findings have important practical implications for the health and development of millions of people in developing countries whose diet is based on cassava. A listing of general conclusions and a list of references are included.

Cassava toxicity and thyroid: research and public health issues: proceedings of a workshop held in Ottawa, Canada, 31 May - 2 June 1982

F. Delange, R. Ahluwalia, ed.

1983, 148p., IDRC-207e, 0-88936-368-4

\$10.00

This proceedings reports on the research relationship between the consumption of cassava and thyroid condition in humans. It reviews results of IDRC-supported studies on the role of cassava in the etiology of endemic goitre and cretinism as well as the research activities on agricultural and public health aspects of cassava. Conclusions and recommendations are presented and a list of participants is included.

(Also available in French and Spanish)

Infant mortality and health in Latin America: an annotated bibliography from the 1979-82 literature

M. Farren

1984, 172p., IDRC-226e, 0-88936-419-2

\$10.00

During the 1960s and 1970s, mortality was a relatively neglected area of research in Latin America and other developing countries. Recent slowdowns in mortality decline in these countries, while mortality levels remain unacceptably high, have spurred a renewed interest in studying mortality levels, trends, and differentials, and their socioeconomic, cultural, and environmental determinants. The emerging research interests underline the need for more adequate conceptual frameworks and the incorporation of new variables such as nutrition, morbidity, and disease treatment strategies into research design. This bibliography attempts to systematize and facilitate access to the growing body of literature on this subject.

Housing and Urban Planning

Basic housing: policies for urban sites, services, and shelter in developing countries

A.A. Laquian

1983, 163p., IDRC-208e, 0-88936-370-6

\$12.00

This study on basic housing focuses on the evaluations of community-upgrading and sites-and-services programs in El Salvador, the Philippines, Senegal, and Zambia. It draws on actual experiences in the formulation and implementation of basic housing policies designed to improve the living conditions of the urban poor. This monograph attempts to determine the extent to which the goals of the projects are being achieved; to assess the impact of the projects on the people living in the project areas, on the neighbouring communities affected by them, on the urban structure, and on the city as a whole; and to compile information that would facilitate the design and implementation of effective policies and projects.

(Also available in French and Spanish)

A place to live: more effective low-cost housing in Asia

Y.M. Yeung, ed.

1983, 216p., IDRC-209e, 0-88936-371-4

\$12.00

This review of specific housing programs and policies regarding low-cost housing in Asia features papers presented at a 1981 seminar jointly sponsored by the Directorate General of Housing, Building, Planning and Urban Development of Indonesia and the IDRC. Among the topics considered are housing programs in Singapore; low-cost, low-income housing in Malaysia; urban housing in Bangkok; slum-improvement programs in the Philippines; and urban-development programs and processes in Hong Kong.

Community participation in urban development: the search for new solutions in Asia

Y.M. Yeung, T.G. McGee, ed.

1986, 278p., IDRC-238e, 0-88936-440-0

\$15.00

Economic growth by the market economies of Asia has led to rapid urban growth. This rapid urban growth has made it difficult for city governments to deliver adequate urban services, both physical and social services. Urban communities have experimented with self-help and participatory mechanisms to improve the quality of urban life. This volume presents the highlights of a study involving Hong Kong, Indonesia, Korea, Malaysia, and the Philippines, that attempted to provide information on a range of basic urban services based on the principle of self-help.

(Will be available in French and Spanish)

Low-income urban shelter projects: an annotated bibliography of research funded by IDRC-IBRD

IDRC, Ottawa; IBRD, Washington

1982, 61p., IDRC-TS41e, 0-88936-355-2

\$3.50

This report lists and, in most cases, summarizes the major research outputs of the evaluation supported by the IDRC and the World Bank of four of the first IBRD-financed low-income urban housing projects. The projects supported the creation of locally staffed evaluation units to conduct a 5-year evaluation of housing projects in El Salvador, Zambia, Senegal, and the Philippines.

(Also available in French and Spanish)

Information Systems and Dissemination

Devindex: index to selected literature on economic and social development / Index d'ouvrages sur le développement économique et social

A series of annotated bibliographies of material published in Canada on economic and social development in developing countries as part of the DEVSIS project.

1980

IDRC, Ottawa

1982, 174p., IDRC-194e,f, 0-88936-331-5

\$10.00

1981

IDRC, Ottawa

1982, 186p., IDRC-203e,f, 0-88936-358-7

\$10.00

1982

IDRC, Ottawa

1983, 302p., IDRC-214e,f, 0-88936-379-X

\$10.00

1983

IDRC, Ottawa

1984, 222p., IDRC-223e,f, 0-88936-411-7

\$10.00

1984

IDRC, Ottawa

1985, 240p., IDRC-240e,f, 0-88936-442-7

\$10.00

Dissemination of scientific information in the People's Republic of China

K.P. Broadbent

1980, 60p., IDRC-148e, 0-88936-238-6

\$5.00

Describes information services in the People's Republic of China, presenting findings concerning library and information services and their related mechanization problems. Outlines the vocational training required for library automation, the use of computers, and current trends and developments in science and technology information. List of acronyms included.

Computer-based conferencing systems for developing countries: report of a workshop held in Ottawa, Canada, 26-30 October 1981

D. Balson, R. Drysdale, B. Stanley, ed.

1982, 43p., IDRC-190e, 0-88936-325-0

\$4.00

This report discusses the opportunities that computer-based conferencing offers to developing countries, as well as its technical feasibility. It includes a brief summary by the participants, a list of participants, and recommendations for future concepts in telecommunications for developing countries.

(Also available in French)

Chinese-character processing for computerized bibliographic information exchange: summary report of an international workshop held in Hong Kong, 17-20 December 1984

T.C. Ting, ed.

1985, 68p., IDRC-239e, 0-88936-441-9

\$8.00

This workshop covered both general topics concerning Chinese data bases and international information exchange as well as specific issues of character coding, input and output methods, regional and international standardization, and software development. The workshop provided a forum for technical discussion among researchers and systems developers from various countries.

International computer-based conference on biotechnology: a case study

D.A. Balson, ed.

1985, 103p., IDRC-241e, 0-88936-445-1

\$5.00

An international computer conference on the bioconversion of lignocellulosics for fuel, fodder, and food took place from May to December 1983. It was initiated to evaluate the appropriateness of using computer conferencing to facilitate scientific discussions and to explore the application of the subject matter to development purposes. Individuals intimately involved in the organization and evaluation of this activity contributed chapters documenting the background, organization, operation, evaluation, and results. These chapters reflect the personal views of the authors, allowing the

reader to view the activity from a number of different perspectives.

(Will be available in French, Autumn 1986)

Information retrieval and library management: an interactive minicomputer system

F.A. Daneliuk

1978, 16p., IDRC-TS14e, 0-88936-170-3

\$2.00

This technical study describes the background and feasibility study of the implementation of IDRC's bibliographic information system on a minicomputer and discusses systems design and computer programming work done at IDRC. A bibliography is included.

(Also available in French)

Recommended methods for development-information systems, volume 1: manual for the preparation of records in development-information systems

G. Morin-Labatut, M. Sly

1982, 272p., IDRC-TS40e, 0-88936-354-4

\$15.00

This style manual provides information concerned with cataloguing, analysis, and recording of accumulated information based on the DEVSIS program.

International socioeconomic information systems: an evaluation study of DEVSIS-type programs

W.O. Aiyepoku

1983, 100p., IDRC-TS43e, 0-88936-366-8

\$5.00

The DEVSIS model has been applied to information initiatives in many regions of the world. This publication represents the first in-depth evaluation of DEVSIS-type information systems and outlines the objectives and organization and presents a résumé of the operational DEVSIS-type systems. It examines their economic and social development in Africa, Latin America, and the Caribbean.

(Also available in French and Spanish)

Checklist of publications associated with IDRC and recorded in AGRIS: 1975-1982

IDRC, Ottawa

1983, 79p., IDRC-TS44e, 0-88936-390-0

\$8.00

This bibliography lists documents on the agricultural sector supported by IDRC and recorded in AGRIS, the International Information System for the Agricultural Sciences and Technology. Generally, the documents described were originally published during the years from 1974 through 1981. Items copublished by IDRC or produced as a result of work financed by IDRC are incorporated as well. This checklist includes a personal author index, corporate entry list, commodities index, and two geographical indexes. Entries are in English, French, and Spanish.

Management of information centres in China: results of a course held in Kunming, Yunnan Province, People's Republic of China, 6-18 December 1982

K.P. Broadbent, ed.

1984, 470p., IDRC-TS50e, 0-88936-426-5

\$15.00

This course may be defined as an informal seminar in the management of information centres in China. The course was based on various experiences in the management of information centres that might be of help to China in planning and organizing their own centres.

This report is offered not as a model for future courses in similar settings but simply as a means for promoting and stimulating knowledge in this field.

Recommended methods for development-information systems, volume 2: guidelines for the building of authority files in development-information systems

A. Di Lauro, M. Sly

1985, 196p., IDRC-TS52e, 0-88936-450-8

\$15.00

This publication contains guidelines for the creation and maintenance of institution authority files and for an authority file of country and region names to be used in the production of printed indexes. It includes a description of authority files in general, their function in manual and computerized information systems, and their maintenance in a cooperative information system. Much of the work is devoted to the procedures used to create and maintain an Institution Authority File (IAF), as well as a field-by-field guide to the IAF with rules for form of entry.

Regional postgraduate program in information science in anglophone Africa: identification of an appropriate location

K.H. Roberts, ed.

1986, 63p., IDRC-TS53e, 0-88936-466-4

\$7.00

This report presents the results of a joint IDRC-UNESCO mission to eight African universities. The mission was undertaken to determine the university's views of the needs in the field of information science, the types of programs required to meet these needs, and the capacity of the institutions to undertake suitable programs. The universities under examination are also ranked in order as potential hosts for a regional postgraduate program in information sciences.

(Will be available in French, Winter 1986)

Postharvest Technology

An end to pounding: a new mechanical flour milling system in use in Africa

P. Eastman

1980, 64p., IDRC-152e, 0-88936-246-7

\$3.50

Describes a novel milling system for cereal grains and legumes common to the semi-arid tropics. This publication

will be of interest to a wide audience, and particularly to those who elaborate agricultural and industrial policy, owners of small-scale industries, and cereal technologists. Complete with sample questionnaire.

(Also available in French)

Food drying: proceedings of a workshop held at Edmonton, Alberta, 6-9 July 1981

G. Yaciuk, ed.

1982, 104p., IDRC-195e, 0-88936-333-1 \$8.00

The workshop covered the most important areas in the design and operation of a drying system: drying requirements, consumer acceptance, heat and mass transfer, and heat sources. The theory and design of a drying chamber and process control are explained and an operational, full-scale drying system is examined. Examples are given in the use of the sun's energy, petroleum products, agricultural wastes, and wood as heat sources for a drying process. Recommendations are made and proposals for future work are given.

(Also available in French)

Rural Development

Caqueza: living rural development

H. Zandstra, K. Swanberg, C. Zulberti, B. Nestel

1979, 321p. (casebound), IDRC-107e, 0-88936-167-3 \$15.00

Describes the "Caqueza Project" of the Instituto Colombiano Agropecuario (ICA) — a rural development project aimed at the development of a strategy for the transference of technical, economic, and social knowledge to small farmers in the Caqueza region of Colombia. The book traces the progress of the project through its first 5 years and shows how achievement of its objectives has resulted in increased crop and animal yields in the region.

The future of pastoral peoples: proceedings of a conference held in Nairobi, Kenya, 4-8 August 1980

J.G. Galaty, D. Aronson, P.C. Salzman, A. Chouinard, ed.

1981, 396p., IDRC-175e, 0-88936-303-X \$20.00

This proceedings presents conference papers by social scientists, representatives of research institutes, development planners, and administrators addressing problems of pastoral peoples. It discusses the programs and policies designed to aid pastoral peoples in developing countries and includes a discussion summary, research recommendations, and a list of participants.

(Also available in French)

Coming full circle — farmers' participation in the development of technology

P. Matlon, R. Cantrell, D. King, M. Benoit-Cattin, ed.

1984, 176p., IDRC-189e, 0-88936-324-2

\$12.00

Involving farmers in identifying the constraints to rural agriculture and in designing measures to alleviate them is the subject of this publication. Agronomists, economists, anthropologists, and others seeking to get the most from research efforts discuss the pitfalls of assembling packages that have flaws because the developers have overlooked some crucial constraint at the farm level. The gaps between results on research stations and those on farms in the Third World have prompted some researchers to view the farmers' conditions as the real laboratories. Why, how, where, and when to get farmers involved in research are the focus of this document, and the degree to which researchers have been able to listen and work with their new partners varies. The book includes a bibliography and list of participants.

(Will be available in French, Autumn 1986)

Social scientists in agricultural research: lessons from the Mantaro Valley project, Peru

D.E. Horton

1984, 67p., IDRC-219e, 0-88936-400-1

\$8.00

Social scientists are latecomers to agricultural research programs and, although most members of the International Agricultural Research Centers now employ economists, few have anthropologists or sociologists on staff. The exception, however, is the International Potato Center (CIP) in Lima, Peru, which has had a "socioeconomic unit" since 1975. This monograph summarizes the experiences and results of the Mantaro Valley project (1977-80) in which an interdisciplinary team consisting of biological and social scientists worked to develop and field-test procedures for on-farm potato research. The anthropologist and sociologist were key elements in the approach and success of the project. Moreover, on-farm research has become an integral part of CIP's research and technology-transfer system and a range of survey and experimental techniques developed during the project are routinely employed in CIP's programs.

(Also available in French and Spanish)

Science and Technology Policy

Science and technology for development: main comparative report of the Science and Technology Policy Instruments project

F. Sagasti

1978, 112p., IDRC-109e, 0-88936-174-6

\$8.50

Report on the Science and Technology Policy Instruments (STPI) project on the implementation of science policy in developing countries. Studies the role of science and technology in economic development, particularly in the industrialization process; mechanisms of policy formulation,

decision-making, and policy implementation; factors affecting technological change; and industrial administration.

(Also available in French)

Science and technology for development: technology policy and industrialization in the People's Republic of China

G.C. Dean

1979, 108p., IDRC-130e, 0-88936-210-6 \$8.50

Describes the study of technological change and modernization in industrial planning in China. Reviews the first development plan (1953-57) in China; its implementation stressing light, medium-, and small-scale industry; industrial development; and the role of research and development in China. Bibliography included.

Consulting and engineering design in developing countries

A. Aráoz, ed.

1981, 140p., IDRC-161e, 0-88936-278-5 \$7.00

This report examines consulting and engineering design organizations in developing countries, presenting case studies from Korea, Brazil, the Philippines, and Argentina. It includes notes for further research.

Priorities for science and technology policy research in Africa: report of a seminar held at the University of Ife, Ile-Ife, Nigeria, 3-6 December 1979

IDRC, Ottawa; ECA, Addis Ababa

1981, 32p., IDRC-162e, 0-88936-279-3 \$3.00

This report discusses science and technology policy research in Africa, examining challenges and prospects, research priorities, labour requirements, and project proposals. It includes a list of participants.

(Also available in French)

Absorption and diffusion of imported technology: proceedings of a workshop held in Singapore, 26-30 January 1981

IDRC, Ottawa

1983, 112p., IDRC-171e, 0-88936-298-X \$9.00

This proceedings presents studies on the accumulation of technological capability and assimilation of imported industrial technology in Bangladesh, Pakistan, India, Sri Lanka, Korea, and Indonesia. It includes a comparative analysis of technology policies of ADIT network countries as well as conclusions and a list of participants.

Transport

Low-cost transport in Asia: a comparative report on five cities

R.B. Ocampo

1982, 77p., IDRC-183e, 0-88936-313-7

\$6.00

This report discusses the results of low-cost transport studies conducted during 1976-77 by university research teams in Indonesia, the Philippines, Thailand, and Turkey. It describes the objectives and the research methods and summarizes the research questions and major findings of the studies. Sample surveys are included.

Water Supply and Sanitation

Wastewater treatment and resource recovery: report of a workshop on high-rate algae ponds, Singapore, 27-29 February 1980

IDRC, Ottawa; Singapore Ministry of National Development

1980, 47p., IDRC-154e, 0-88936-260-2

\$4.50

This report discusses wastewater, water treatment, waste recycling, and renewable resources. It examines cultivation techniques, food production, harvesting, and processing in Singapore and Israel. A list of participants and a bibliography are included.

Rural water supply in developing countries: proceedings of a workshop on training held in Zomba, Malawi, 5-12 August 1980

IDRC, Ottawa

1981, 144p., IDRC-167e, 0-88936-292-0

\$9.00

This proceedings discusses low-cost renewable energy technologies now available or being field-tested. It examines the role of training in operation and maintenance, community participation, health, education, economic, and sociocultural aspects of water-supply delivery. It presents guidelines for new directions in rural water supply training.

(Also available in French)

Sanitation in developing countries: proceedings of a workshop on training held in Lobatse, Botswana, 14-20 August 1980

IDRC, Ottawa

1981, 172p., IDRC-168e, 0-88936-293-9

\$9.00

This proceedings discusses sanitation and waste-disposal techniques in Ethiopia, Kenya, Tanzania, Malawi, Botswana, Zambia, Mozambique, and Lesotho. It examines development and training programs for professional, technical, and village-level personnel. Recommendations for specific follow-up activities are included.

(Also available in French)

Village handpump technology: research and evaluation in Asia

D. Sharp, M. Graham, ed.

1982, 72p., IDRC-204e, 0-88936-360-9

\$4.00

This monograph presents summaries of the results of IDRC's Asian network of water-supply projects. It identifies future research priorities, specifically the need to investigate large-scale manufacturing of the polyvinyl chloride (PVC) pump and the social and public-health factors that are an essential part of the program.

(Also available in French and Spanish)

Women's issues in water and sanitation: new responses to an age-old challenge

IDRC, Ottawa

1985, 104p., IDRC-236e, 0-88936-437-0

\$12.00

A seminar on "Women's Issues in Water and Sanitation" was held in Manila, Philippines, 24-26 September 1984 to discuss the problems and constraints that have limited women's participation in water and sanitation activities in the past and identify ways in which their roles can be enhanced in the future.

This publication documents the results of the seminar by reviewing women's past efforts in water supply and sanitation activities and presenting abstracts of papers about ongoing research. In addition, the 62 representatives from Africa, Latin America, Middle East, and Asia were divided into four working groups and asked to come up with ideas for future research. These preliminary proposals are also presented in the form of "project leads," which represent the first step of project development.

(Also available in French and Spanish)

Evaluating health impact: water supply, sanitation, and hygiene education

J. Briscoe, R.G. Feachem, M.M. Rahman

1986 (in press), IDRC-248e, 0-88936-470-2

\$8.00

In November 1983, an IDRC-supported workshop on "measuring the health impact of water supply and sanitation programs" was convened in Bangladesh. The workshop was attended by 42 scientists and planners representing the biomedical, engineering, and social sciences. The purpose of the workshop was to review accumulated information in the field of water and sanitation and to determine whether it was possible to develop a comprehensive body of information on the health impact of water and sanitation projects. This report summarizes the papers presented by the workshop participants and is intended to provide guidelines for planners on when and how evaluations of the health impact of water supply and sanitation projects should be undertaken.

(Will be available in French and Spanish)

Rural water supply in China

IDRC, Ottawa

1981, 92p., IDRC-TS25e, 0-88936-261-0

\$7.00

A translation from five Chinese manuals on water supply techniques, this report discusses potable water, source improvement, water treatment, supply configurations, and well drilling and repairs.

Laboratory and field testing of handpumps

S.Y. Goh

1985, 138p., IDRC-TS51e, 0-88936-438-9

\$10.00

This technical study contains a detailed description of the laboratory and field testing protocols developed by researchers at the University of Malaya to ensure the proper operation of a low-cost handpump. The handpump, which incorporates plastics in the manufacture of the below-ground components, was developed for use in rural areas of the developing world. This study includes a mathematical analysis of the pump and the methodology used during field testing.

(Also available in French)

Forthcoming Publications *

Market research for food products and processes in developing countries: proceedings of a workshop held in Singapore, 1-4 April 1986

R.H. Young, C.W. MacCormac, ed.

1986, IDRC-249e, 0-88936-479-6

The objectives of the meeting were to create a greater awareness of the opportunities for using market research in guiding food technology projects in developing countries and to highlight market-research methodologies that were appropriate for use by Asian scientists. This publication provides resource material and case study examples demonstrating market research in food technology projects along with the conclusions and recommendations of the participants on increasing the use of this type of analysis in future research.

Energy research: directions and issues for developing countries

IDRC, Ottawa; United Nations University, Tokyo

1986, IDRC-250e, 0-88936-479-6

This report of the Energy Research Group summarizes energy-related research and technology of importance to developing countries and recommends priorities for these countries to finance and conduct such relevant research. A list of ERG's members and a bibliography are included.

Low-cost primary education: implementing an innovation in six nations

W.K. Cummings

1986, IDRC-252e, 0-88936-482-6

(Will be available in French)

**Titles subject to change.*

Role of evaluation in national agricultural research systems: proceedings of a symposium held in Singapore, 7-9 July 1986

1986, IDRC-254e, 0-88936-486-9

Teaching children of the poor: an ethnographic study in Latin America

B. Avalos, ed.

1986, IDRC-253e, 0-88936-484-2

(Will be available in French and Spanish)

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